

BLM'S Wind Energy Development Policy and Renewable Energy Assessment

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Tampa



Administrative Incentives

- President's National Energy Policy
- BLM's National Energy Policy Implementation Plan
- DOI - DOE Conference on Renewable Energy
- WGA's Environmental Summit

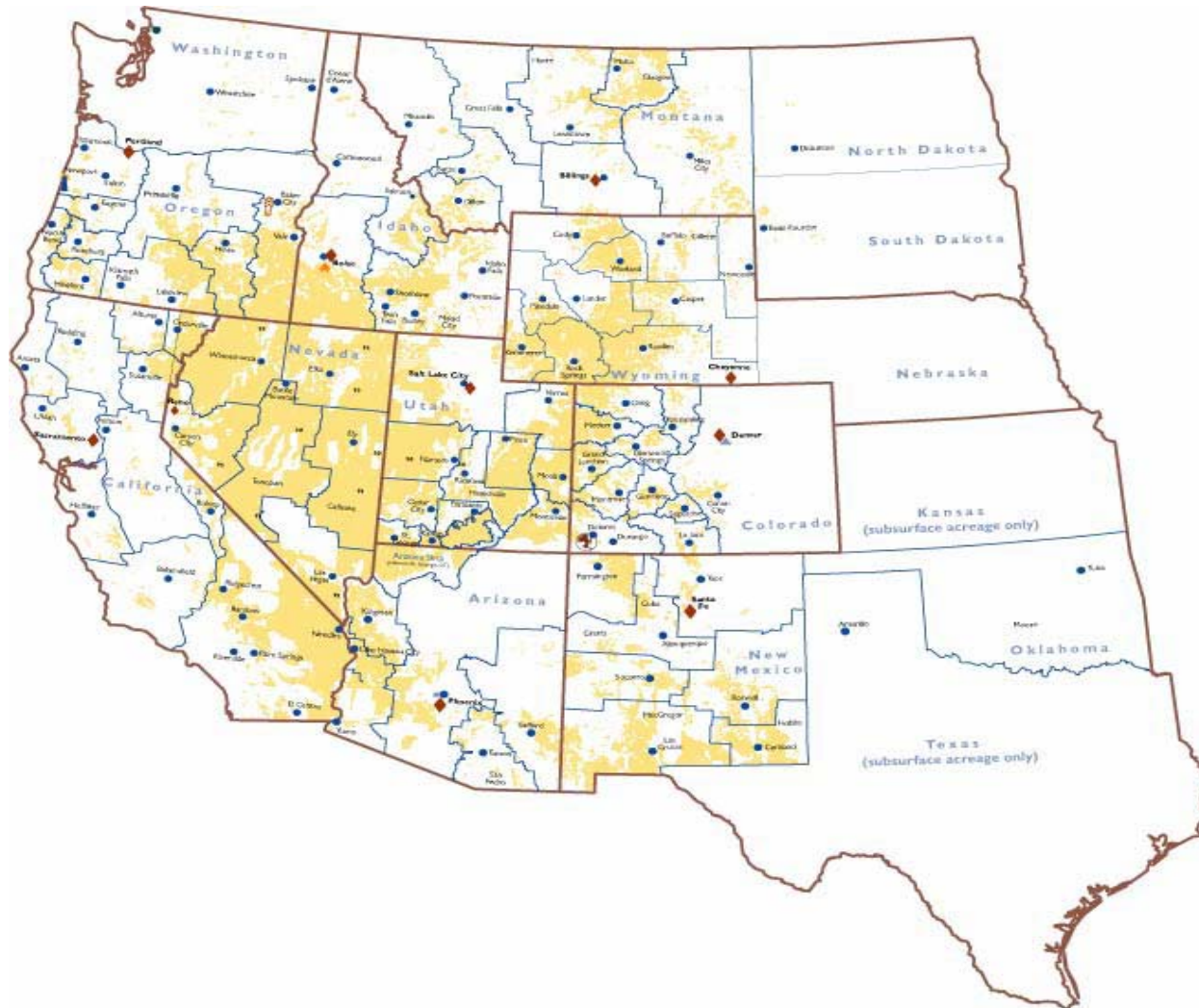
Industry Incentives

- BLM Lands Have Significant Potential for Wind Energy Development
- Extension of Federal Wind Energy Production Tax Credit
- Variety of State-level Tax Credits
- States Renewable Energy Portfolio Standards

Inventory and Planning

- General Policy to Encourage Development of Wind Energy in Acceptable Areas
- When Land Use Plans Are Revised There Is Benefit to Address Renewable Resource Potential
- BLM and NREL Assessed Wind Energy on Public Lands

BLM Lands



The Process

- GIS
- Screening
- Top picks for CSP, PV, wind, biomass
- Top picks for geothermal

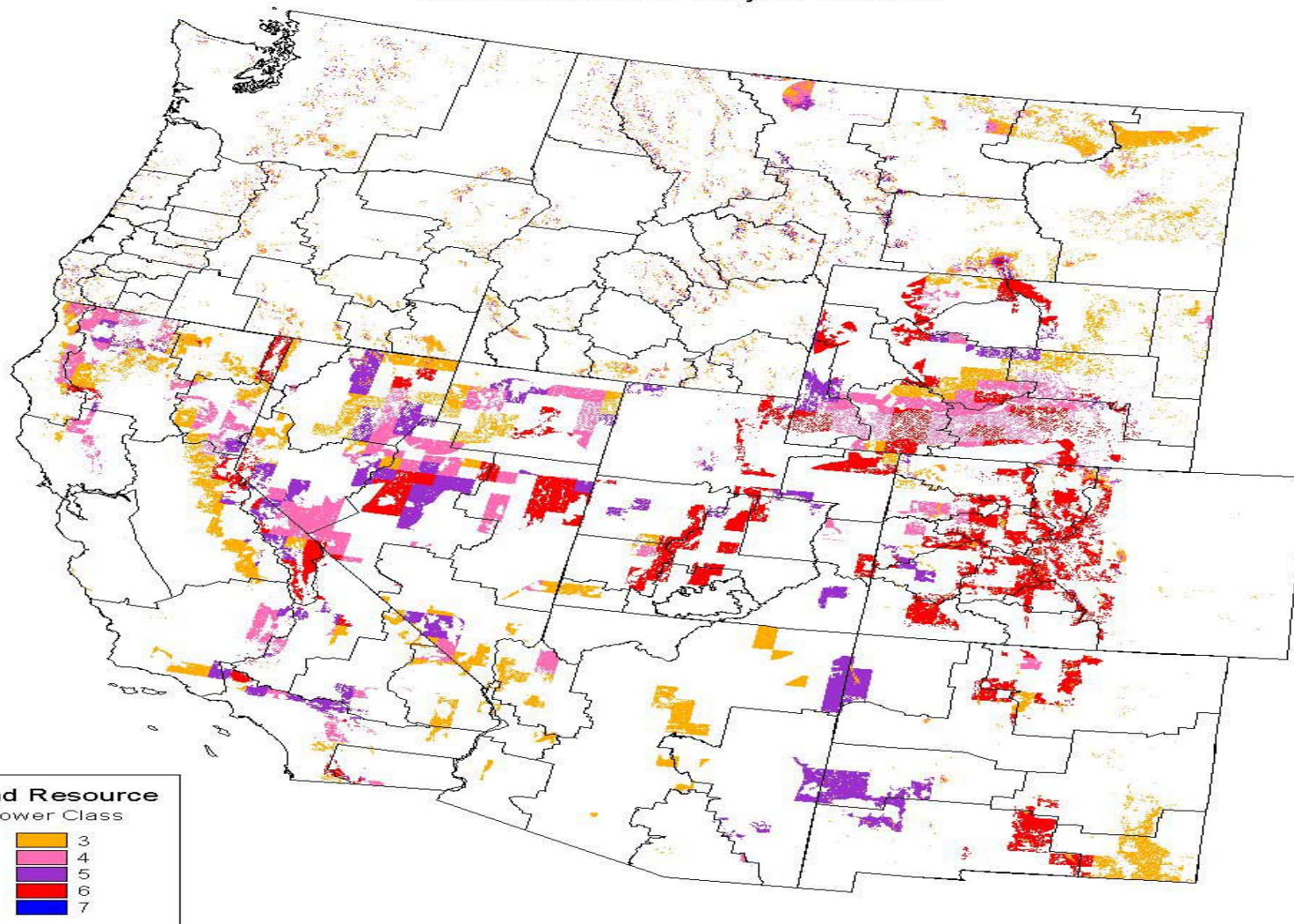


Study Results

- 63 Planning Units – high potential for 1 or more renewable energy resources
- 20 Planning Units – high potential for 3 or more
- Also considered U.S. Forest Service and BIA Lands
- Did not address resources in Alaska
- Land use plans

NREL/BLM Renewable Resource Assessment Project

DOI Bureau of Indian Affairs, BLM, and USDA Forest Service Lands:
Wind Resource Analysis Results



Wind Resource Power Class



The lands shown meet the following criteria:

- 1) Wind resource \geq power class 3
- 2) Within 25 miles of transmission 69-345 kv
- 3) Within 50 miles of major road
- 4) DOI Bureau of Indian Affairs, BLM or USDA Forest Service owned lands
- 5) BLM and USDA Forest Service compatible land use

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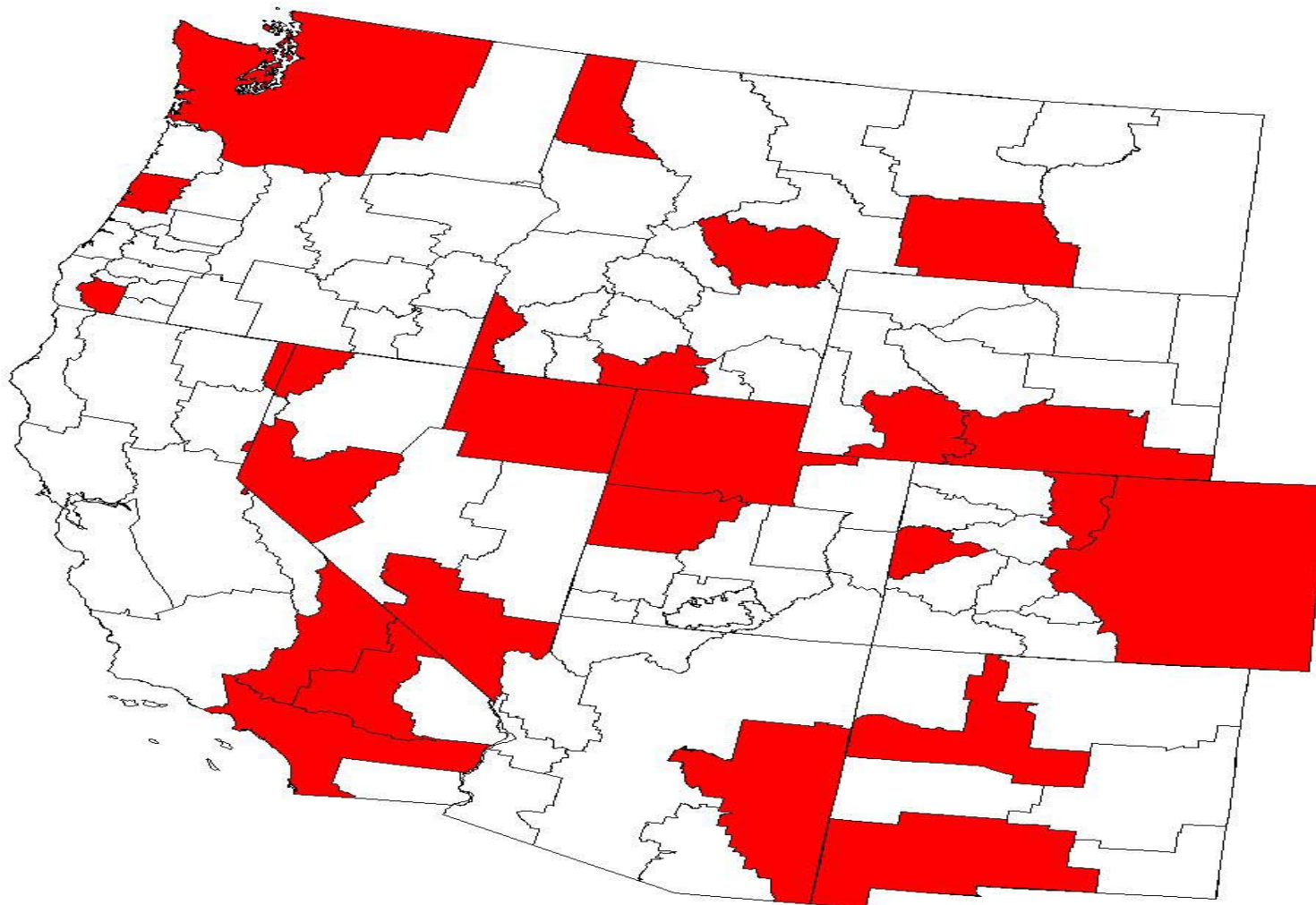
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Wind: NREL/BLM Renewable Resource Assessment Project

25 Highest Potential Planning Units



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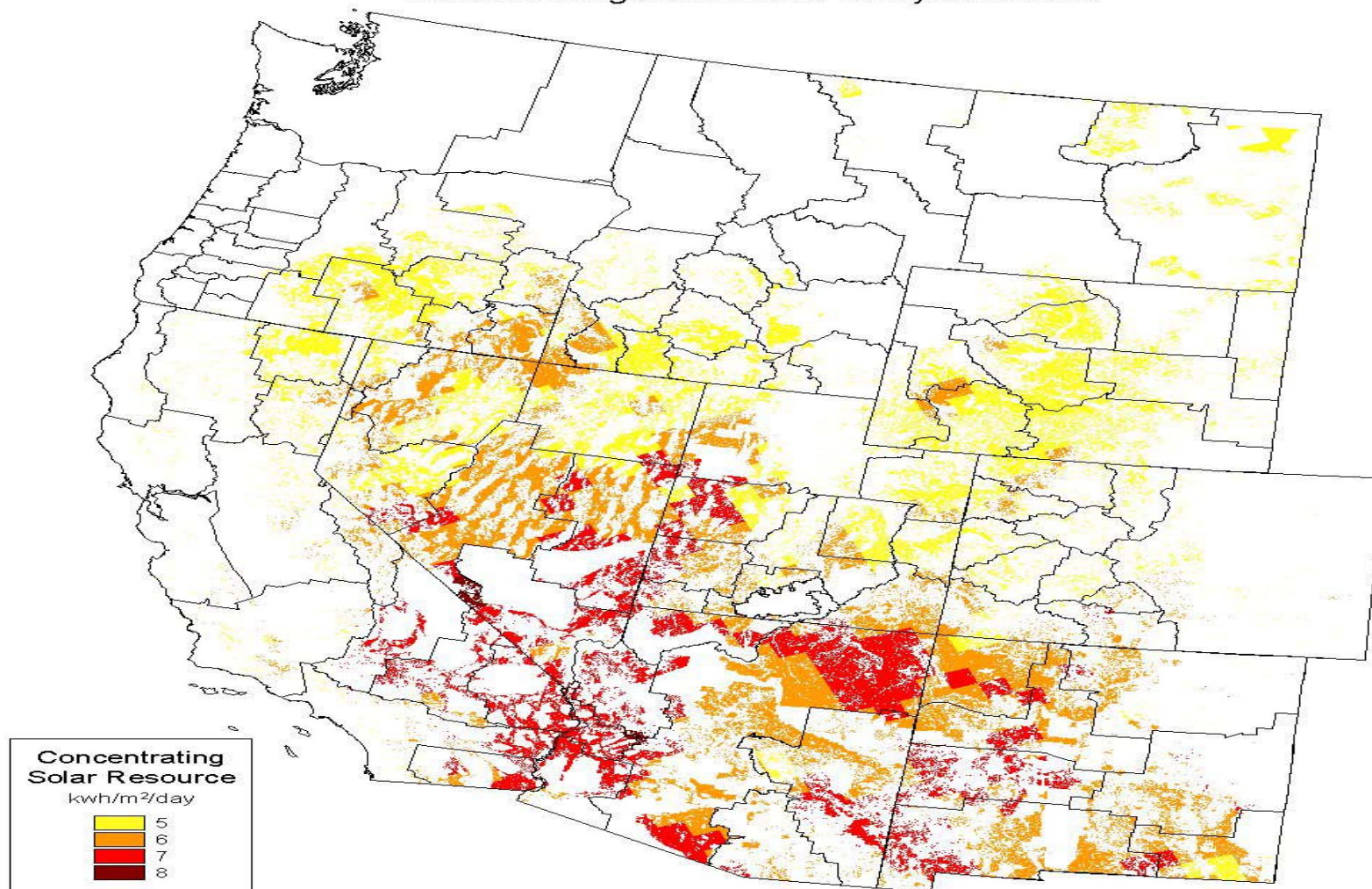
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NREL/BLM Renewable Resource Assessment Project

DOI Bureau of Indian Affairs, BLM and USDA Forest Service Lands:
Concentrating Solar Power Analysis Results



The lands shown meet the following criteria:

- 1) Minimum direct solar resource of 5 kwh/m²/day
- 2) Terrain slope <= 5%
- 3) Within 50 miles of transmission 115-345 kv
- 4) Within 50 miles of major road or railroad
- 5) Minimum parcel size of 40 acres (continuous)
- 6) DOI Bureau of Indian Affairs, BLM or USDA Forest Service owned lands
- 7) BLM and USDA Forest Service compatible land use

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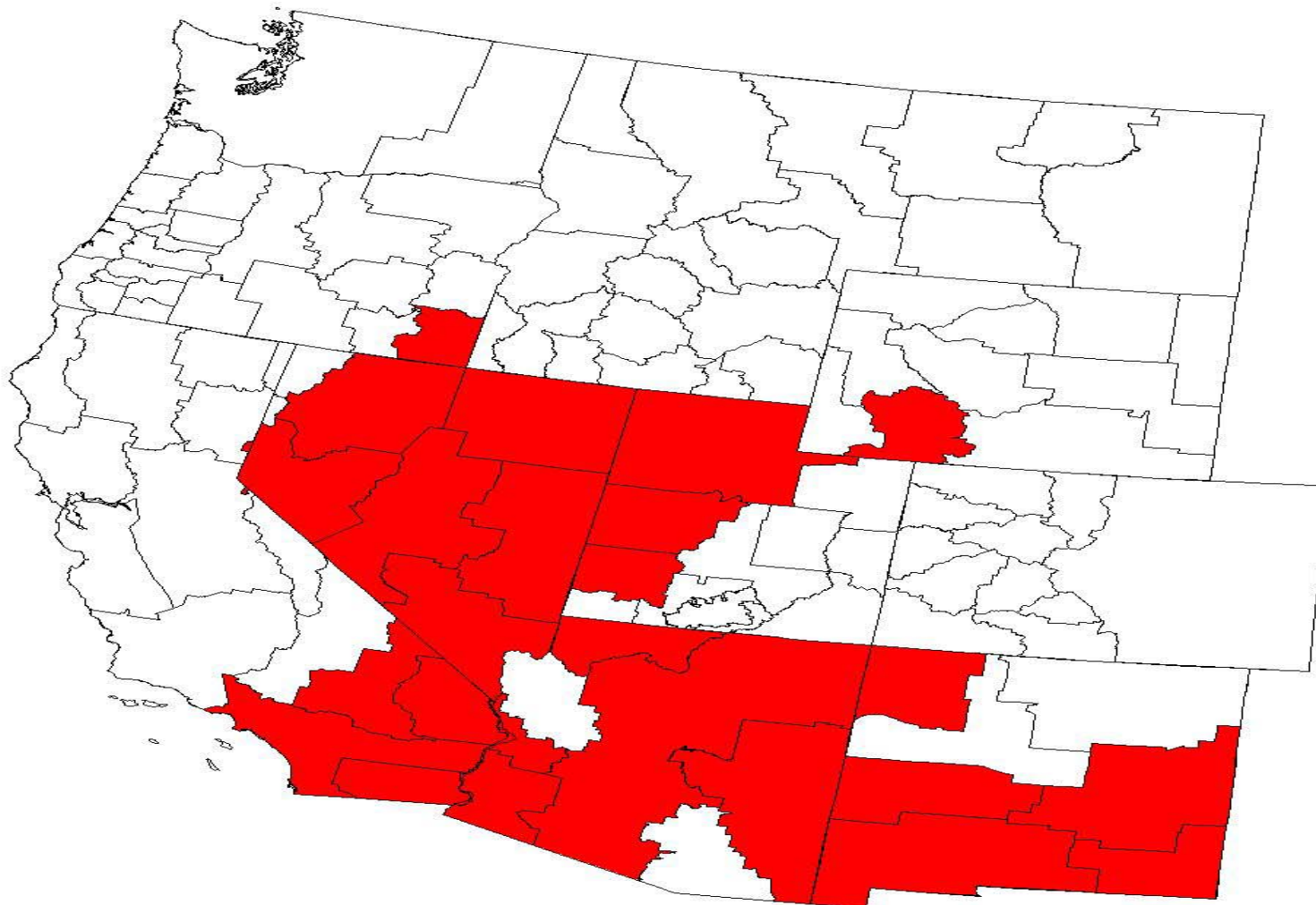
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CSP: NREL/BLM Renewable Resource Assessment Project

25 Highest Potential Planning Units



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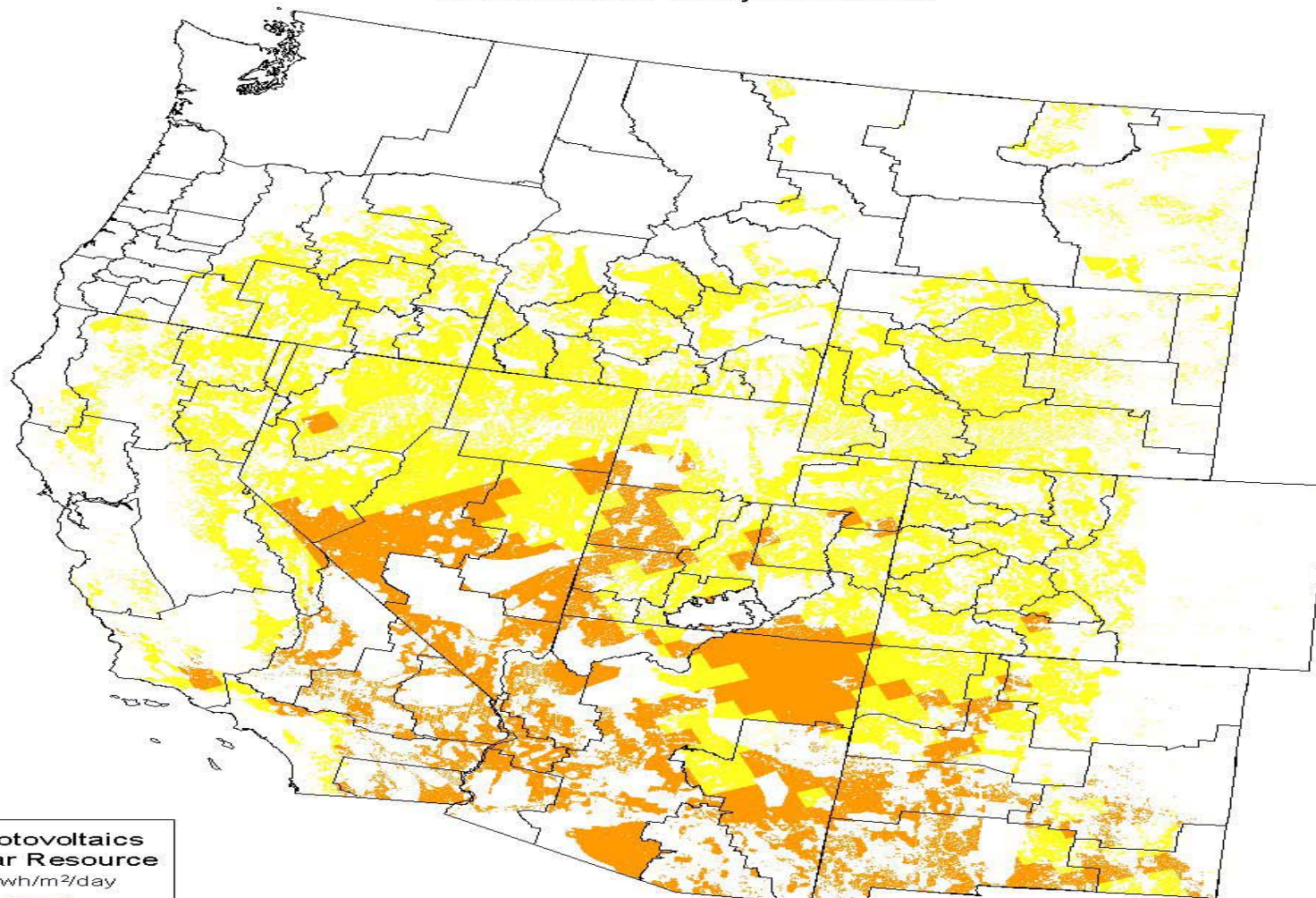
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PV: NREL/BLM Renewable Resource Assessment Project

DOI Bureau of Indian Affairs, BLM and USDA Forest Service Lands:
Photovoltaics Analysis Results



Photovoltaics Solar Resource

kwh/m²/day



The lands shown meet the following criteria:

- 1) Minimum tilt=latitude solar resource of 5 kwh/m²/day
- 2) Within 50 miles of transmission 115-345 kv
- 3) DOI Bureau of Indian Affairs, BLM or USDA Forest Service owned lands
- 4) BLM and USDA Forest Service compatible land use

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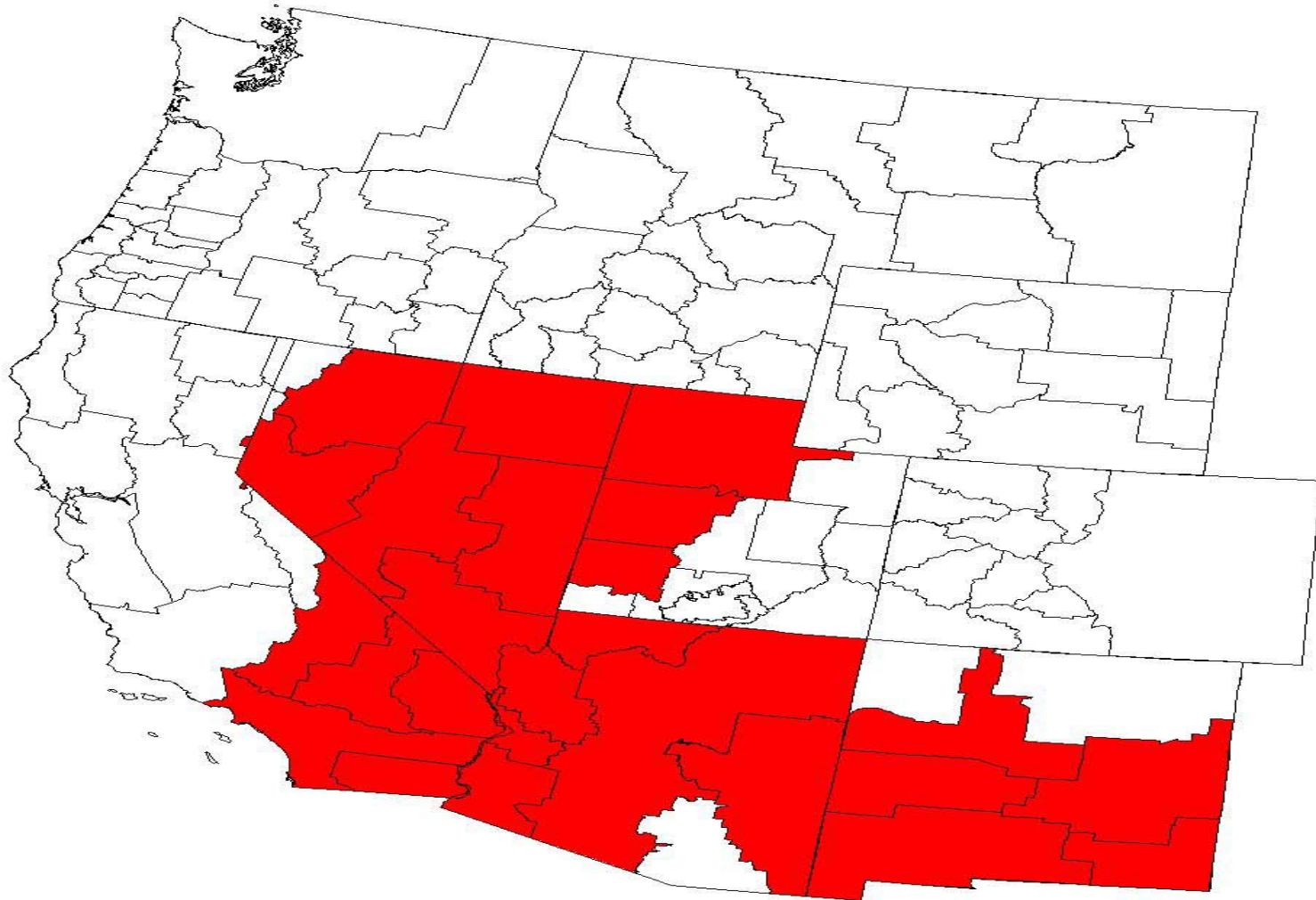
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PV: NREL/BLM Renewable Resource Assessment Project

25 Highest Potential Planning Units



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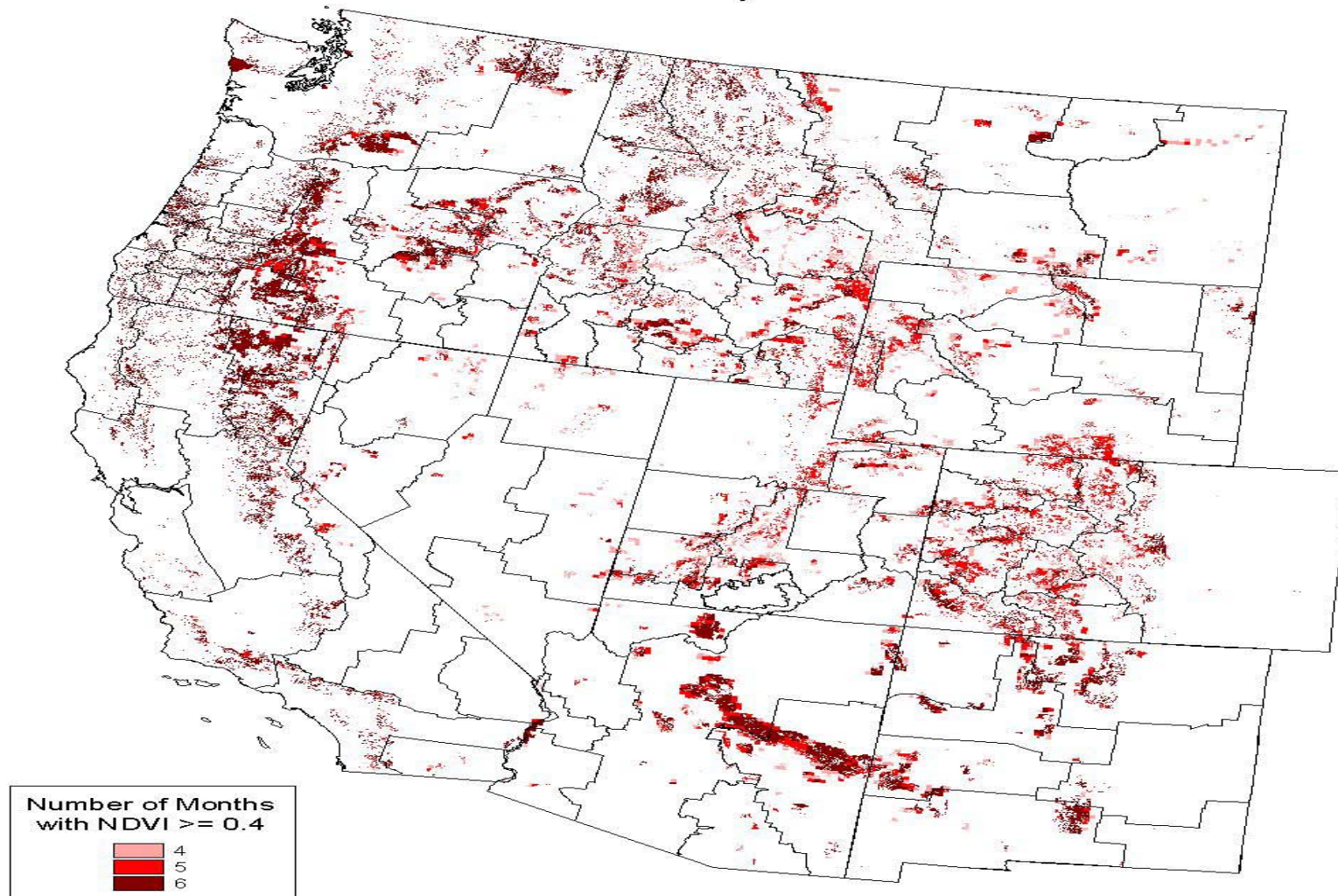
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Biomass: NREL/BLM Renewable Resource Assessment Project

DOI Bureau of Indian Affairs, BLM and USDA Forest Service Lands:
Biomass Analysis Results



The lands shown meet the following criteria:

- 1) NDVI \geq 0.4 at least 4 months between April and September 2000
- 2) Terrain slope \leq 12%
- 3) Within 50 miles of town of 100 people
- 4) BOI Bureau of Indian Affairs, BLM or USDA Forest Service owned lands
- 5) BLM and USDA Forest Service compatible land use

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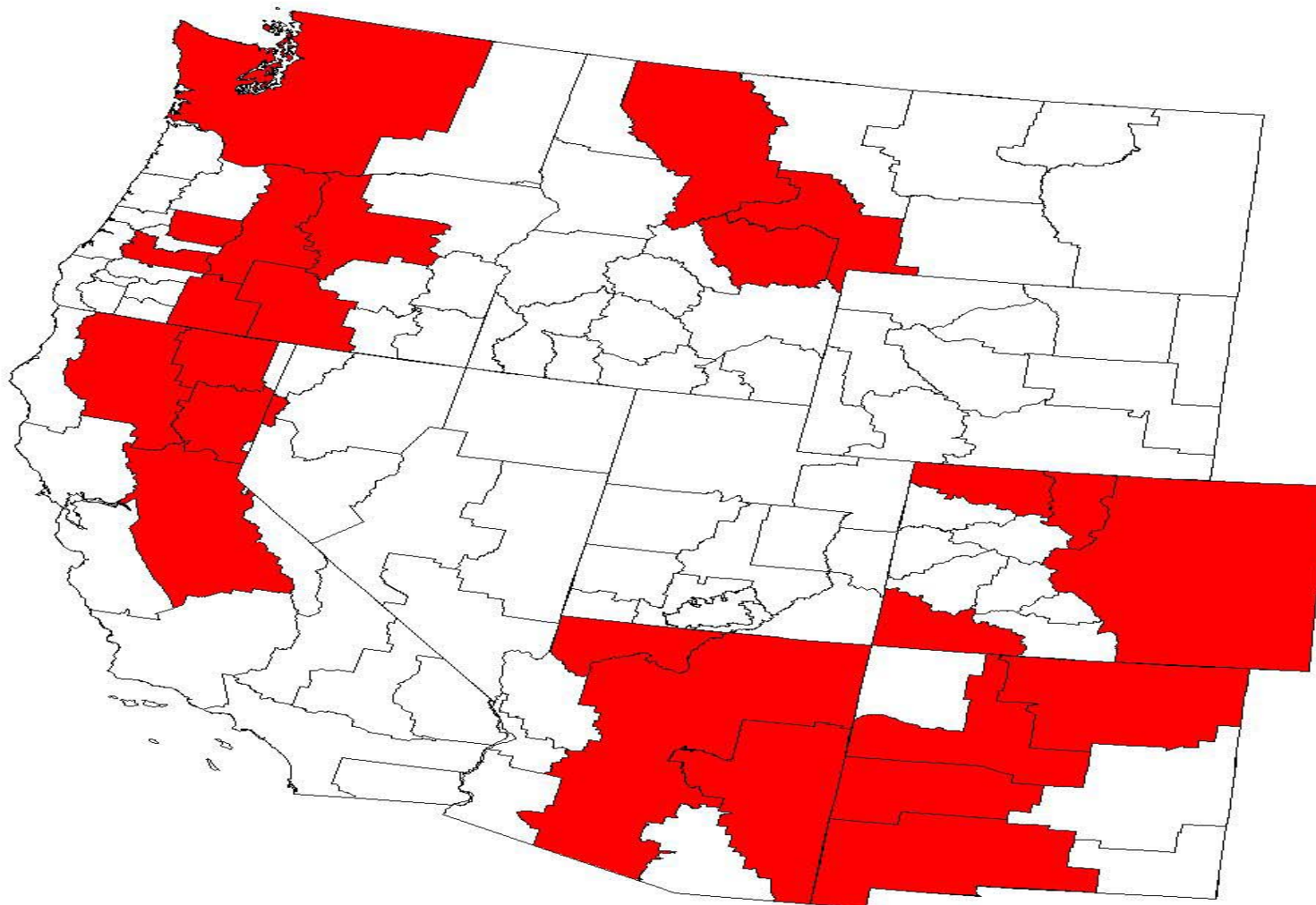
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Biomass: NREL/BLM Renewable Resource Assessment Project

25 Highest Potential Planning Units



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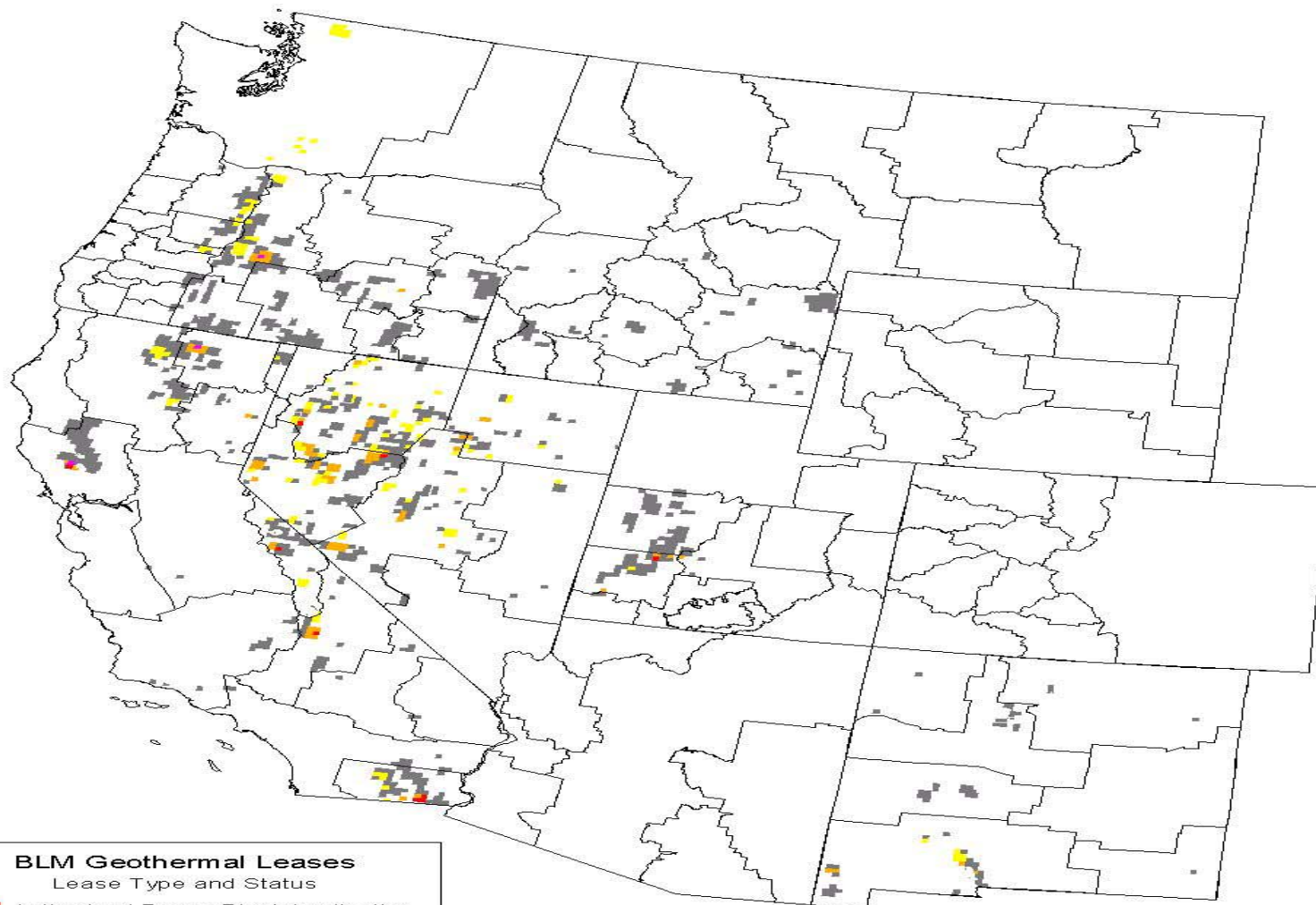
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Geothermal: NREL/BLM Renewable Resource Assessment Project

BLM Geothermal Lease Information (CA, ID, NM, NV, OR, UT and WA)



BLM Geothermal Leases

Lease Type and Status

- Authorized Power Plant Application
- Pending Power Plant Application
- Authorized Lease
- Pending Lease
- Expired Lease

This data is shown to the Township/Range level. The actual lease or application may occur in only a small portion of the area shown. When multiple lease types or status occur in the same parcel, only the 'highest' potential application is shown.

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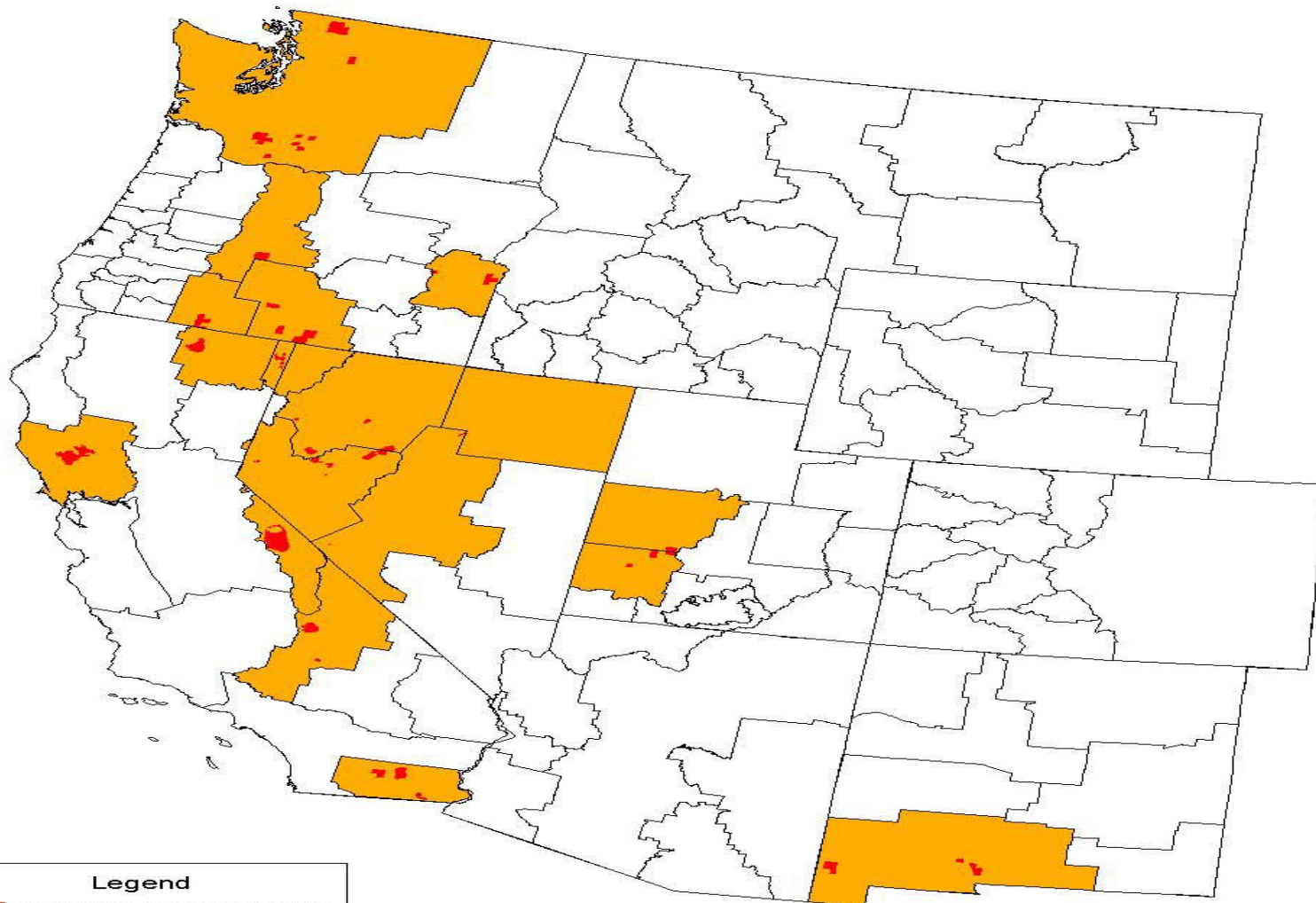
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Geothermal: NREL/BLM Renewable Resource Assessment Project

BLM Planning Units with "Top-Pick" Geothermal Sites



Legend

- "Top-Pick" Geothermal Site
- Selected Planning Unit

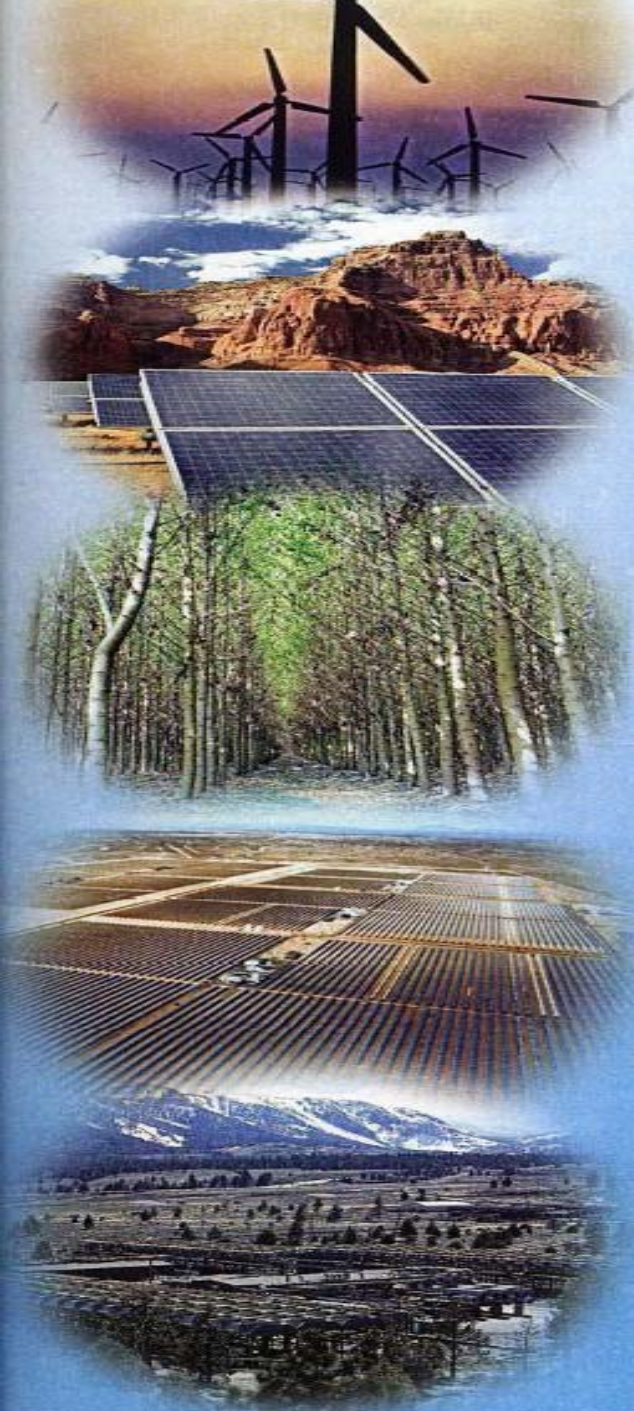
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BUREAU OF LAND MANAGEMENT

ASSESSING THE POTENTIAL FOR RENEWABLE ENERGY ON PUBLIC LANDS

NOVEMBER 2002



Report Available

- www.blm.gov/nstc/RenewEnergy/index.html
- www.nrel.gov/docs/fy03osti/32077CD.zip
- mike_kirby@blm.gov



General Provisions for all Grants

- All Applications and Authorizations Subject to Cost Recovery
- All Applications for Testing and Monitoring or for Development Projects Will Be Identified As High Priority Work
- All Applications Should Be Processed Within a 30 Day Timeframe

Grant for Site Specific Wind Energy Testing/Monitoring

- Small Site Specific Meteorological Towers and Instrumentation
- \$50 Per Year for Each Tower Site
- Limit to 3 Years

Grant for Wind Energy Testing/Monitoring With Project Area

- \$1000/year or \$1/acre/year Whichever Is Greater
- Can Be Extended Beyond 3 Years
- Grant Holder Must Submit Plan of Development (POD) for BLM Review, Analysis and Separate Approval for Future Wind Energy Development Project

Grant for Commercial Wind Energy Development

- Includes Turbines, Access Roads, Transmission Facilities, and Support
- Rental Based on Comparative Market Surveys or Appraisals
- Grant for Life of Energy Facility

Competitive Interest

- Typically Applications Will Be Processed on a First Come Basis
- Used if Two Applicants Have Current Power Purchase Agreements or Interconnect Agreements With Utility Transmission Provider
- Used if LUP Decision Specifically Identified an Area for Competitive Leasing

Environmental Review for Commercial Development

- For Site Development Applications the Scope of the NEPA Analysis Will Be Much Broader to Include Turbines, Roads, and Transmission Facilities
 - Compliance Requirement With:
 - Endangered Species Act
 - Migratory Bird Treaty Act
 - National Historic Preservation Act
 - All Other Appropriate Laws

Results

Over 35 Applications Received by
BLM Offices in Nevada, New
Mexico, Idaho, California,
Wyoming, Oregon

